

AMENDMENTS TO THE CLAIMS

1-2. (Cancelled)

3. (Currently Amended) ~~The process according to claim 1, wherein the vinyl compound (I) is vinylcyclohexane.~~ A process for producing an olefin-based copolymer, which comprises copolymerizing at least one olefin selected from the group consisting of ethylene and straight chain α -olefins, a vinyl compound (I) described below and a polyene (II) described below:

Vinyl compound (I): vinylcyclohexane; and

Polyene (II): a compound having two or more of ethylene bonds and at least one combination of two ethylene bonds in which those are bonded to each other through at least three carbon atoms.

wherein contents of monomer units based on the olefin, monomer units based on the vinyl compound (I) and monomer units based on the polyene (II) in the olefin-based copolymer to be obtained are 2 to 97 mol %, 2 to 97 mol % and 0.0001 to 10 mol % or less based on 100 mol % of the total monomer units of the copolymer, respectively.

4-5. (Cancelled)

6. (Previously Presented) The process according to claim 3, wherein the contents of monomer units based on the olefin, monomer units based on the vinyl compound (I) and monomer units based on the polyene (II) in the olefin-based copolymer to be obtained are 6 to 84 mol %, 15 to 93 mol % and 0.01 to 1 mol % or less based on 100 mol % of the total monomer units of the copolymer, respectively.

7. **(Previously Presented)** The process according to claim 6, wherein the polyene (II) is an aliphatic compound.